

## Comparison of presence of microorganisms causing halitosis before and after using chlorhexidine and Irsha mouthwashes

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### \*Abstract

The aim of this cross-sectional study was to compare the load of microorganisms causing halitosis before and after using chlorhexidine and Irsha mouthwashes. Samples were taken from the dorsal surface of the tongue of 50 patients with halitosis by a wooden tongue blade and immediately transported to liquid thioglycollate medium. The samples were cultured in blood agar and Eosin Methylene Blue (EMB) then were incubated at 37°C for 48 hours. A 0.5 McFarland suspension was prepared from anaerobic bacteria and they were allowed to grow in a nutritious environment. After setting them for 48 hours in incubator again, the microbial colonies were counted. The patients were randomly assigned into two equal groups to receive either Irsha or Chlorhexidine mouthwashes. After 2 weeks, the sampling was processed using the same protocol and the colony counts were compared. Data were analyzed using Mann-Whitney U test and Wilcoxon test. Anaerobic bacteria colony counts were decreased from  $(4 \times 10^3 - 9 \times 10^{15})$  to  $(10^3 - 10^{11})$  in chlorhexidine group and from  $(10^3 - 7 \times 10^{11})$  to  $(10^3 - 10^{11})$  in Irsha group. The effect of chlorhexidine mouthwash was significantly more than Irsha mouthwash.

**Keywords:** Halitosis, Mouthwashes, Chlorhexidine

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